Remarks

Applicants have canceled claims 1, 13-23, and 28 without prejudice or disclaimer; the Examiner acknowledged the timely traversal of the restriction requirement made in Paper No. 14 (mailed September 27, 2001) in Paper No. 17 at page 1. Applicants have also added claims 121-128. Attached hereto is a marked-up version of the changes made by the current amendment, captioned "Version With Markings To Show Changes Made." No new matter has been added.

Applicants thank the Examiner for the telephone interview of January 15, 2001, in which counsel for Applicants pointed out that the Examiner had not considered Reference A1 (Marchese et al.) cited on the Information Disclosure Statement submitted July 10, 1998; the Examiner indicated that this reference would be considered. *See* Paper No. 18. Counsel for Applicants also noted that U.S. Patent No. 6,184,358 does not have a 102(e) date prior to the present application's effective filing date; the Examiner acknowledged this in Paper No. 18. Finally, counsel for Applicants discussed with the Examiner the propriety of the restriction requirement and constructive election made in Paper No. 17; Applicants further address these issues and traverse the restriction in Section III below.

Claims 29-128 are pending; the Examiner has withdrawn claims 33-50, 56-63, 65-73, 79-96, 102-109, and 111-119 from consideration. *See* Paper No. 17, pages 1-2.

I. Amendment of the Sequence Listing and Drawings

SEQ ID NOS:1 and 2, as depicted in the Sequence Listing and in Figures 1A-1D and 2A-2B, have been amended to change the nucleotide at position 491 from A to T, and to change the amino acid residue at position 107 from N to Y. Accordingly, Applicants have submitted herewith a Substitute Sequence Listing incorporating the amended

sequences. Applicants have also submitted as Exhibit 1 copies of original Figures 1A-1D and 2A-2B with the changes marked in red for approval by the Examiner, as well as Substitute Formal Drawings of Figures 1A-1D and 2A-2B incorporating the amended sequences for approval by the Official Draftsperson.

The amendments to SEQ ID NOS:1 and 2 and Figures 1A-1D and 2A-2B introduce no new matter. In particular, the amendments are supported by the sequence of ATCC Deposit Number 97334, which inherently contains a T nucleotide at position 491, and thus inherently encodes a Y amino acid residue at position 107. Applicants note that ATCC Deposit Number 97334 was deposited on November 6, 1995 (prior to the effective filing date of the instant application), and was disclosed in International Application PCT/US96/00499 at page 4, fourth full paragraph, and page 6, last paragraph.

In support of the above, Applicants submit herewith an executed Declaration of Melanie Lenhart Under 37 C.F.R. § 1.132 (the "Lenhart Declaration"). As the Lenhart Declaration sets forth, ATCC Deposit Number 97334 was obtained from the ATCC, and the DNA clone contained in the deposit was resequenced. *See* Lenhart Declaration, paragraphs 2-4. As Ms. Lenhart stated in her Declaration, while original Figures 1A-1D show an A residue at position 491, a T residue is present at this position in the sequence obtained from the DNA clone contained in ATCC Deposit Number 97334. *See id.* at paragraph 5 and Exhibit E; *see also* Exhibit 1 attached hereto. Likewise, while original Figures 1A-1D show an AAC as the 107th codon of the nucleotide sequence, encoding for an Asn residue, a TAC codon, encoding for a Tyr, is present at this position in the sequence obtained from the DNA clone contained in ATCC Deposit Number 97334. *See* Lenhart Declaration at paragraph 6 and Exhibit E.

These differences have been adjusted in SEQ ID NOS:1 and 2 in the Substitute Sequence Listing, and in the Substitute Formal Drawings of Figures 1A-1D and 2A-2B, both submitted herewith. Applicants note that SEQ ID NO:1 as depicted in the Substitute Sequence Listing and in the Substitute Formal Drawings of Figures 1A-1D is identical at all but one nucleotide to the sequence shown in the figures and sequence listing as originally filed, with the same start codon, stop codon, and length. Likewise, SEQ ID NO:2 as depicted in the Substitute Sequence Listing and in the Substitute Formal Drawings of Figures 1A-1D and 2A-2B is identical at all but one amino acid residue to that shown in the figures and sequence listing as originally filed.

Thus, as Ms. Lenhart stated in her Declaration, a person of ordinary skill in the art, upon routine sequencing of the DNA clone contained in the DNA plasmid of ATCC Deposit Number 97334 using methods well known in the art prior to January 11, 1996, would readily determine that the residue at position 491 is an A residue; and thus, the encoded amino acid at position 107 is Tyr, especially when using original Figures 1A-1D as a guide. Accordingly, the amendments to SEQ ID NOS:1 and 2 and Figures 1A-1D and 2A-2B introduce no new matter.

It is well-accepted that Applicants may amend the specification to correct the formula of a chemical compound after an application's filing date, as the formula is an inherent property of the compound, and thus amending the specification to correct the formula is not new matter. *See, e.g., In re Nathan*, 328 F.2d 1005, 1008, 140 U.S.P.Q. 601 (C.C.P.A. 1964); *accord Kennecott Corp. v. Kyocera Int'l, Inc.*, 5 U.S.P.Q.2d 1194, 1198 (Fed. Cir. 1987), *cert denied*, 486 U.S. 1008 (1988) ("The disclosure in a subsequent patent application of an inherent property of a product does not deprive that product of the benefit of the earlier filing date"); *see also Ex parte Maizel*, 27 U.S.P.Q.2d 1662 (B.P.A.I.

1992) (applying *In re Nathan* to DNA sequence corrections). The standard applied in *Nathan* was whether the original specification discloses the claimed compounds and provides "the means for identifying them irrespective of the wrong formulae." *Nathan*, 328 F.2d at 1008.

As detailed above, the description of SEQ ID NOS:1 and 2 in the application as filed, including the original sequence listing and figures, certainly is sufficient to distinguish these molecules from others, so that there would be no question that Applicants described the genus of claimed molecules. *See Nathan*, 328 F.2d at 1008. Further, one skilled in the art would readily recognize the amended sequences depicted in the Substitute Sequence Listing and in the Substitute Formal Drawings as being described in the application as filed. Therefore, as in *Nathan*, the amendment to the sequences set forth above introduces no matter, and should be entered.

II. Request for Approval of Substitute Formal Drawings

As discussed in Section I above, Applicants have submitted proposed Substitute Formal Drawings incorporating the amended SEQ ID NOS:1 and 2. The Examiner is requested to review and approve the proposed changes to Figures 1A-1D and 2A-2B marked in red on the copy of the pending drawings attached as Exhibit 1. As detailed above, no new matter has been added. Should the changes be approved, also submitted herewith is a Submission of Substitute Formal Drawings with six sheets of corrected drawings of Figures 1A-1D and 2A-2B for approval by the Official Draftsperson.

III. Second Restriction Requirement

Pursuant to Paper No. 17, mailed December 17, 2001, the Examiner has further required restriction within provisionally elected Group III, as defined by the Examiner in Paper No. 12, mailed March 28, 2001. More particularly, the Examiner has required restriction between Groups 14-18, contending that the inventions of these groups are "independent or distinct from the invention originally claimed for the following reasons;" no reasons are provided. Paper No. 17, pages 1-2.

The Examiner further states that "since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits." Paper No. 17, page 2. The Examiner then indicates that the claims of Groups 14-18 (along with Groups 1-12) are withdrawn from consideration. See id.

Applicants respectfully disagree and traverse.

A. <u>Election</u>

Applicants point out that all of claims 29-120 were submitted prior to the first action on the merits (Paper No. 17, mailed December 17, 2001). Accordingly, even assuming *arguendo* that the instant restriction requirement is proper, it is improper to withdraw the claims of Groups 14-18 based on the alleged constructive election of the claims of Group III. Further, as the instant application is the national stage of International Application PCT/US96/00499, PCT Rules 13.1 to 13.2 and M.P.E.P. § 1850 must be followed, rather than restriction practice under 37 C.F.R. §§ 1.142(b) and 1.145, or M.P.E.P. § 821.03.

However, notwithstanding the foregoing, Applicants provisionally elect, with traverse, the invention of Group III, represented by claims 29-32, 51-55, 64, 74-78, 97-101, 110, and 120 for further prosecution. Applicants reserve the right to file one or more divisional applications directed to non-elected inventions should the instant restriction requirement be made final. Applicants point out that claims 1, 13-23, and 28 have been canceled without prejudice or disclaimer, and that new claims 121-128 are directed to subject matter falling within the ambit of Group III as originally cast by the Examiner.

B. <u>Traversal</u>

With respect to the Examiner's division of claims 29-120 into Groups III and 14-18, Applicants respectfully disagree and traverse. Applicants note that in Paper No. 17, the Examiner presents no reasons for the restriction of Groups 14-18 from Group III, much less sufficient reasons to hold that the claims of Groups III and 14-18 do not form a single general inventive concept under PCT Rule 13.1. Thus, restriction is improper.

Moreover, the claims of Groups 14-18 all depend from the independent claims of Group III. Under M.P.E.P. § 1850, unity of invention is only considered for the independent claims, not the dependent claims. *See* M.P.E.P. § 1850 at 1800-61. If the independent claims "satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend on the independent claims. In particular, it does not matter if a dependent claim itself contains a further invention." *Id.* Thus, even assuming *arguendo* that restriction of Groups 14-18 from Group III would be proper under 35 U.S.C. § 121, it is clearly not proper under PCT Rules 13.1 to 13.2 and M.P.E.P. § 1850. Applicants therefore respectfully request that the instant restriction requirement

be reconsidered and withdrawn, and that the claims of Groups 14-18 be examined with the pending claims of Group III.

Further, even presuming that restriction practice under 35 U.S.C. § 121 were appropriate (which it is not), Applicants point out that the Examiner cannot show that the examination of Groups 14-18 with Group III would present a serious burden under M.P.E.P. § 803. In particular, the search already conducted by the Examiner of the independent claims of Group III fully encompassed the dependent claims of Groups 14-18, which contain all of the limitations of the claims of Group III. Therefore, even though Groups 14-18 are separately classified, since no additional search is required, there can be no serious burden on the Examiner to examine the claims of Groups 14-18 with the claims of Group III, rendering the restriction requirement improper. Indeed, Applicants point out that the M.P.E.P. recognizes this under the guidelines for linking claims discussed in M.P.E.P. §§ 809 – 809.04. In particular, as the independent claims of Group III are linking genus claims:

The linking claims must be examined with the invention elected, and should any linking claim be allowed, the restriction requirement must be withdrawn. Any claim(s) directed to the nonelected invention(s), previously withdrawn from consideration, which depends from or includes all the limitations of the allowable linking claim must be rejoined and will be fully examined for patentability.

M.P.E.P. § 809. See also M.P.E.P. § 809.03.

Accordingly, the restriction of Groups 14-18 from Group III is improper under PCT Rules 13.1 to 13.2 and M.P.E.P. § 1850 and under 35 U.S.C. § 121. Applicants therefore respectfully request that the instant restriction requirement be reconsidered and withdrawn, and that the claims of Groups 14-18 be examined with the pending claims of Group III.

Applicants retain the right to petition from the restriction requirement under 37 C.F.R. § 1.144.

IV. Rejection of the Claims Under 35 U.S.C. § 102(e)

The Examiner has rejected claims 14, 29-32, 51-55, 64, 74-78, 97-101, 110, and 120 under 35 U.S.C. § 102(e) as allegedly being anticipated by Loetscher et al (U.S. Patent 6,184,358).

Applicants respectfully disagree and traverse this rejection.

In order for a U.S. patent to anticipate claims under 35 U.S.C. § 102(e), the patent must have a filing date earlier than the effective filing date of the claims. *See, e.g.*, M.P.E.P. § 706.02(a) at 700-21 to 700-22. As indicated in the Interview Summary mailed January 16, 2002 (Paper No. 18), the Examiner has agreed that "the 102(e) reference of US '358 patent does not have an earlier 102(e) date compared to the present application's priority date of 1/11/96." Thus, the Loetscher et al. reference cannot anticipate the present claims under 35 U.S.C. § 102(e). Accordingly, Applicants respectfully request that the instant rejection of claims 14, 29-32, 51-55, 64, 74-78, 97-101, 110, and 120 under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

Conclusion

Entry of the above amendments is respectfully solicited. In view of the foregoing remarks, Applicants believe that this application is now in condition for allowance, and an early notice to that effect is urged. The Examiner is invited to call the undersigned at the phone number provided below if any further action by Applicant would expedite the

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examination of this application. Finally, if there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425.

Respectfully submitted,

Dated: March 18, 2002

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VIA HAND DELIVERY MARCH 18, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Li

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Application Serial No.: 09/101,518

Art Unit: 1646

Filed: January 11, 1996

Examiner: Pak, M.

Title: Human G-Protein Chemokine Receptor HSATU68

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1, 13-23, and 28 have been canceled without prejudice or disclaimer.

New claims 121-128 have been added.